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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/880,103

06/14/2001

Itzik Ben-Bassat

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EXAMINER

HUYNH, SON P

ART UNIT

PAPER NUMBER

2623

MAIL DATE

DELIVERY MODE

08/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/880,103	BEN-BASSAT ET AL.	
	Examiner	Art Unit	
	SON P. HUYNH	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2008 and 04 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 16, 18, 24, 26 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 16, 18, 24, 26 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2008 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/4/2008 has been entered.

Response to Arguments

2. Applicant's arguments filed 4/29/2008 have been fully considered but they are not persuasive.

Applicant argues Rakib in view of Dinwiddie et al., Soleimani, Fleming, and Emil fail to disclose or suggest " the transmitter portion and the receiver portion are separate configuration connected by connectors" and in contrast, Rakib clearly illustrates a receiver and a transmitter that are not separate, but unified (page 6, paragraphs 1-3, page 7, paragraphs 2-3). This argument is respectfully traversed.

Rakib discloses the gateways comprises interface circuitry for transmitting downstream video signal and circuitry for transmitting upstream signal; the circuitry for transmitting upstream signal and circuitry for transmitting downstream signal are connected together see include, but are not limited to, figures 3-5, paragraphs 0022, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179). Each interface circuit in the gateway is a separate expansion card that plugs into the system bus of the host and has a connector suitable to interface with the physical media of the particular digital data delivery service. Likewise, the network interface to the local area network(s) can be an expansion card (see include, but are not limited to, paragraphs 0039, 0041, page 29, claim 34). Thus, the limitation "the transmitter portion and the receiver portion are separate configurations connected by connector" is interpreted as the circuitry for transmitting upstream signal and the circuitry for transmitting downstream signal are separates configurations connected by connectors such as connections 90, 160, or any interfaces connected between the two circuitries or two expansion cards).

In addition, Soleimani discloses transmitter portion and the receiver portion are separate configurations connected by connectors (e.g., circuitry portion 88 and circuitry portion 90 and/or 86 are separate configurations connected by connectors between portions 88 and 90/86 - see include, but is not limited to, figure 3).

Emi also discloses transmitter portion and receiver portion are separate configurations connected by connectors (interpreted as transmitting portion comprising elements 1-6,

8,... and receiving portion comprises elements 14,13,11,16, 15,... are separate configurations connected by connectors/interfaces for connection between transmitting portion and receiving portion - see include, but are not limited to, figures 1-3).

For the reasons given above, rejections on the claims are analyzed as discussed below.

Claims 1-14, 17, 19-23, 25, 27-30, 32-41 have been canceled.

Drawings

3. The drawings are objected to because the labels and reference number in the figures 4-5 are not clear. The label "Figure 1" submitted on 4/29/2008 is the same as label "Figure 1" in the drawings submitted on 6/14/2001. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each

drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 15-16, 18, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. (US 2004/0172658 A1), in view of Dinwiddie et al. (US 6,481,013), and Soleimani et al. (US 5,678,228, and further in view of Emi (US 5,715,275)).

Regarding claim 15, Rakib discloses a transceiver (transceiver in gateway – figures 3-4b) for a personal computer (computer 22, or computer 24, etc. – figures 3-4b), the personal computer has a port for coupling to the gateway (figures 3-4b), the transceiver comprising:

a transmitter portion that resides in a box external to the computer and that transmits radio frequency signals responsive to data received from the personal computer via the port (transmitter portion resides in the gateway external to the computer 22, comprising circuitry that transmits signals upstream responsive to data received from the personal computer via the port – see include, but are not limited to, figures 3-5, paragraphs 0022, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179);

a receiver portion that resides in the external box and that receives radio frequency signals and converts the received signals to data for transfer to the personal computer via the port (portions in the gateway comprising circuitry that receives downstream signals and converted the received signals for transmitting via the port to the computer – see figures 3-5 and discussion in the “Response to Arguments” above);

wherein the transmitter portion and the receiver portion are separate configurations connected by connectors (interpreted as the circuitry for transmitting upstream signal and the circuitry for transmitting downstream signal are separates configurations connected by connectors such as connections 90, 160, or any interfaces connected between the two circuitries or two expansion cards –see include, but are not limited to, figures 3-5, paragraphs 0022, 0039, 0041, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179 and discussion in the “Response to Arguments” above).

Rakib further discloses a modem (modulator and demodulator) in circuitry that transmitting upstream signal (see include, but are not limited to, figures 3-5).

However, Rakib does not explicitly disclose the upstream signal is transmitted to a satellite, a synchronizing signal is conveyed from the receiver portion to the transmitter portion via the auxiliary bus and the transmitter portion including a frequency synthesizer with a selectable frequency range and programmable modulator for allowing a transmission/reception frequency and modulation to be selectively modified by the personal computer, and synchronizing signal is conveyed from the receiver and the transmitter via an auxiliary bus.

Dinwiddie et al. discloses a transmitter portion (104 or 108 transmits signals from audio video sources 45 or 49-figures 5A, 5B, 10A, 10B) includes a frequency synthesizer with a selectable frequency range and programmable modulator for allowing a transmission/reception frequency and modulation to be selectively modified by the personal computer (see include, but are not limited to, col. 9, lines 15-40, col. 11, lines 58-62), col. 16, lines 50-67). Dinwiddie further discloses using USB type port coupled to computer for transmitting data (see include, but are not limited to, col. 11, line 1-col. 12, line 20) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib with the teaching as taught by Dinwiddie in order to yield predictable results such as to convert the signals to a format that suitable for providing to display device or to provide a simpler "plug and play" connection of peripheral equipment to a PC (col. 11, lines 1-12) thereby improving convenience for connection between different devices. However, Rakib in view of Dinwiddie does not explicitly disclose the upstream signal is transmitted to a satellite,

synchronizing signal is conveyed from the receiver and the transmitter via the auxiliary bus.

Soleimani discloses a satellite transceiver wherein upstream signals are transmitted to a satellite (see figures 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib in view of Dinwiddie with the teaching as taught by Soleimani in order to yield predictable results such as to provide an alternative way to transmit signal or to transmit upstream signal faster.

Soleimani further discloses an auxiliary bus directly connecting the transmitter portion 90 and/or 86 and receiver portion 88 – see include, but are not limited to, figure 3. However, Rakib in view of Dinwiddie and Soleimani does not explicitly disclose synchronizing signal is conveyed from receiver portion and the transmitter portion via an auxiliary bus.

Emi discloses synchronizing signal is conveyed from receiver portion to transmitter portion via an auxiliary bus (see include, but are not limited to, figures 1-3, col. 2, lines 44-59, col. 4, line 62-col. 5, line 22, col. 6, lines 37-48 and discussion in the “Response to Arguments” above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib in view of Dinwiddie and Soleimani to use the teaching as taught by Emi in order to yield predictable results such as to reduce packet collision thereby improve transmission efficiency.

Regarding claim 16, Rakib in view of Dinwiddie and Soleimani and Emi teaches a transceiver as discussed in the rejection of claim 15. Rakib in view of Dinwiddie, Soleimani and Emi also discloses an auxiliary bus connects the transmitter portion and the receiver portion as discussed in the rejection of claim 15 above (also see include, but are not limited to, Emi: figure 1-2), the transmitter portion and the receiver portion inherently has respective connectors so that the auxiliary bus connect the transmitter portion and the receiver portion to each other.

Regarding claim 18, Rakib in view of Dinwiddie and Soleimani and Emi teaches a transceiver as discussed in the rejection of claim 15. Emi further discloses the transmitter portion includes a frequency synthesizer (e.g. frequency synthesizer 8 – figure 1) for generating the radio frequency signals.

Regarding claim 24, Rakib in view of Dinwiddie and Soleimani and Emi teaches a transceiver as discussed in the rejection of claim 15. Rakib further discloses the transmitter portion comprises a modem (see include, but are not limited to, figures 3-4b). Thus, the transmitter portion includes modulation circuitry. Emi further discloses the transmitter includes radio frequency modulation circuitry and the modulation circuitry (encoding circuit 1 and modulating circuit 2 – figures 1-2) includes an encoder that encodes error correction into the transmitted signal (figures 1-2, col. 4, line 62-col. 5, line 30). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib in view of Dinwiddie and Soleimani and

Emi to include the teaching as further taught by Emi in order to yield predictable results such as to improve efficiency in data transmission.

6. Claims 26 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rakib et al. (US 2004/0172658 A1) in view of Fleming (US 6,073,188), Soleimani et al. (US 5,678,228), and further in view of Emi (US 5,715,275).

Regarding claim 26, Rakib discloses receiving signal and transmitting signal between a personal computer having a port and external network comprising a satellite network, the personal computer having a port coupled to LANs 18, 20 including USB (figures 3, 4) the method comprising:

coupling a transmitter that resides in a box external to the personal computer to a port (coupling transmitter in transmitting circuitry in the gateway to port for transmitting upstream signal - see include, but are not limited to, figures 3-5, paragraphs 0022, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179);

transmitting a radio frequency signal from the transmitter to external network responsive to data received from the port (see include, but are not limited to, figures 3-5, paragraphs 0022, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179 and discussion in the rejection of claim 15);

coupling a receiver that resides in the box to the port and receiving radio frequency signal in the receiver from the satellite; and converting the radio frequency signal to data for transfer to the port (coupling receiving circuitry resides in the gateway

to the USB connection and receiving radio frequency signal in the receiving circuitry from satellite and converting the signal received from the satellite to data for transfer to the port via the LAN— see figures 3-5 and discussion in rejection of claim 15);

wherein the transmitter portion and the receiver portion are separate configurations connected by connectors (interpreted as the circuitry for transmitting upstream signal and the circuitry for transmitting downstream signal are separate configurations connected by connectors such as connections 90, 160, or any interfaces connected between the two circuitries or two expansion cards —see include, but are not limited to, figures 3-5, paragraphs 0022, 0039, 0041, 0048, 0056, 0081-0082, 0086-0088, 0118-0119, 0122, 0125, 0179 and discussion in the “Response to Arguments” above).

Rakib further discloses the transceivers includes upstream transmitter for receiving digital data from the host computer, and transmits it to a satellite uplink facility via a direct connection (paragraph 0022, lines 29-36), and shared function would include the power supply (paragraph 0023). The LANs are inexpensive and there many sources of inexpensive network adapters, hubs and peripherals, PCI bus (paragraphs 0079, 0122, 0183) and the gateway also has interface to USB (figure 4A). However, Rakib does not explicitly discloses the upstream is transmitted to the satellite; the port coupled to the computer is an USB type port; and conveying a synchronizing signal from the receiver to the transmitter via a connector directly connecting the receiver and the transmitter .

Fleming discloses using network hub (122) which couples USB port to USB interfaces (124) via a USB bus (126) to a computer (figure 1a, col. 4, lines 19-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib to use the teaching using USB type port couple to USB hub as taught by Fleming in order to yield predictable results such as to improve convenience for connecting different devices (col. 2, lines 32-51).

However, Rakib in view of Fleming does not explicitly disclose the upstream is transmitted to the satellite; and conveying a synchronizing signal from the receiver to the transmitter via a connector directly connecting the receiver and the transmitter

Soleimani discloses a satellite transceiver wherein upstream signals are transmitted to a satellite (see figures 1-3). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib in view of Fleming with the teaching as taught by Soleimani in order to yield predictable results such as to provide an alternative way to transmit signal or to transmit upstream signal faster.

Soleimani further discloses an auxiliary bus directly connecting the transmitter portion 90 and/or 86 and receiver portion 88 – see include, but are not limited to, figure 3. However, Rakib in view of Fleming and Soleimani does not explicitly disclose conveying a synchronizing signal from receiver and the transmitter portion via a connector directly connecting the receiver and transmitter.

Emi discloses conveying a synchronizing signal from receiver to transmitter portion via an a connector directly connecting the receiver and the transmitter (see

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include, but are not limited to, figures 1-3, col. 2, lines 44-59, col. 4, line 62-col. 5, line 22, col. 6, lines 37-48 and discussion in the rejection of claim 15 above). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rakib in view of Fleming and Soleimani to use the teaching as taught by Emi in order to yield predictable results such as to reduce packet collision thereby improve transmission efficiency.

Regarding claim 31, the additional limitation as claimed correspond to the additional limitation of claim 24, and are analyzed as discussed with respect to the rejection of claim 24.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SON P. HUYNH whose telephone number is (571)272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Son P Huynh/
Primary Examiner, Art Unit 2623

July 30, 2008